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BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Paper No. 23

Application Number: 09/107,486
Filing Date: 06/30/1998
Appellant(s): Yoshiko SHIIMORI et al.

D. Richard Anderson
For Appellant

EXAMINER'S ANSWER

This is in response to appellant's brief on appeal filed 7/24/2003.

(1) Real Party in Interest

A statement identifying the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

A statement identifying the related appeals and interferences which will directly affect or be directly affected by or have a bearing on the decision in the pending appeal is contained in the brief.

(3) Status of Claims

The statement of the status of the claims contained in the brief is correct.

(4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

(5) Summary of Invention

The summary of invention contained in the brief is correct.

(6) Issues

The appellant's statement of the issues in the brief is correct.

Appellant's brief includes a statement that claims 1-4, 9; 25; 29, 33; 26, 30, 34-36, 38-43, 45-48, 50; 5-7, 13-18; 19, 20, 22-24, 27, 28, 31, 32; 10, 12; 8; and 49 do not stand or fall together and provides reasons as set forth in 37 CFR 1.192(c)(7) and (c)(8).

(8) Claims Appealed

The copy of the appealed claims contained in the Appendix to the brief is correct.

(9) Prior Art of Record

The following is a listing of the prior art of record relied upon in the rejection of claims under appeal.

5,687,332	Kurahashi et al.	11-1997
6,370,280	Cok et al.	04-2002
5,933,584	Maniwa	08-1999
5,764,235	Hunt et al.	06-1998
5,720,013	Uda et al.	02-1998
5,926,154	Hirono et al.	07-1999

(10) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claims 1-10, 12-18, 29, and 33 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Regarding claim 1: The limitations of "storing film image data that has undergone display direction conversion processing," "transmit a thumbnail of the film image data that has undergone direction conversion processing," "reducing the data quantity of the film image data to be transmitted to editing image data and further reducing to thumbnail image data, in response to the image transmission command transmitted from the first transmission device transmitting the thumbnail image data to the client computer, in response to the display information transmitted from the second transmission device" and "the thumbnail image data and the editing image data displayed in a correct direction on the display device due to the display direction conversion processing" are subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Regarding claim 3: The limitations of "thinning out the editing image data" are subject matter which was not described in the specification in such a way as to reasonably convey to one

skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Regarding claim 5: The limitations of "storing film image data that has undergone display direction conversion processing" are subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Regarding claim 9: The limitations of "transmit a thumbnail film image data generated from the film image data stored in the image server, the thumbnail image data having been subjected to display direction conversion processing" are subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Regarding claims 10, 12: The limitations of "reading film image data," "color conversion processing on the read film image data," and "transmitting the second color converted film image data to the client computer after subjecting the second color converted film image data to display direction conversion processing so that the film image is displayed on the display device in a correct direction" are subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Regarding claims 13, 17: The limitations of "displaying a plurality of sample film images," "transmitted to the image data receiver after subjecting the sample film images to display direction

conversion processing so that the sample film images are displayed in a correct direction" are subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Regarding claim 18: The limitations of "displaying a plurality of sample film images on the display device on the basis of the received image display data after subjecting the sample film images to display direction conversion processing so that the sample film images are displayed in a correct direction" are subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Regarding claims 2, 4, 6-8, 14-16: Claim 2, 4, 14-16 are rejected because they depend on rejected claims 1, 5, 13.

Regarding claims 29, 33: The limitations of "the information relating to the film image data corresponding to the type and resolution of a display device in the client computer and the number of colors of the display device" are subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Claim 25 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kurahashi et al. (U.S. Patent # 5,687,332) in view of Cok et al. (US 6,370,280) and Maniwa. (US 5,933,584)

Regarding claim 25: Kurahashi discloses an image communication system in which an image server (23, fig. 2) and a client computer (22, fig. 1) are communicating with each other. The client transmits image data (column 7 line 55-60) and information (editing data, column 7 line 67) relating to the image data to the server. The image server comprises: an image output device (the function part of control program of the image server that is sending image data to printer 134 of fig. 13, column 11 line 59, column 12 line 33-38, fig. 13) for outputting an image on the basis of the information relating to the image data transmitted from the client, (column 11 line 59, column 12 line 1-40, fig. 13) and an information transmission device (server processing unit, column 8 line 5-10) for transmitting, to the client computer, information (editing data, column 8 line 5-10) relating to the image data transmitted from the client computer. (Column 7 line 65-67, column 8 line 1-10). The client further includes a retrieval mean (see # 324 of fig. 3) to retrieval image data specified by the information relating to the image data transmitted from the image server, wherein the image output device and the image information transmission device in the image server, and the retrieval means in the client computer are each separate and distinct component within the image communication system. (See above discussion)

Kurahashi does not teach that the image data are film image data.

Cok, in the same area of scanning image data, teaches to create film image data to be stored in a server.

Therefore, it would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified Kurahashi's image processing method to include: using film image data as image data.

It would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified Kurahashi's image processing method by the teaching of Cok because of the following reasons: (a) it would have allowed the image to be created in a manner that is very flexible and is usable over a wide distribution to diverse producers, as taught by Cok at column 2, line 23-30; and (b) film image would have allowed users to create realistic images with low cost.

Kurahashi as modified by Cok still does not teach the image output device outputting the film image after subjecting the film image to display direction conversion.

Maniwa, in the same area of storing image data teaches outputting images after subjecting the image to display direction conversion. (Column 29, lines 50-60)

Therefore, it would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified Kurahashi/Cok image processing method to include: the image output device outputting the film image after subjecting the film image to display direction conversion.

It would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified Kurahashi/Cok image processing method by the teaching of

Maniwa because of the following reasons: (a) it would have allowed the image to be displayed in a correct direction as taught by Maniwa at column 29, lines 55-61.

Claims 29, 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kurahashi et al. (U.S. Patent # 5,687,332) in view of Cok et al. (US 6,370,280) and Hunt (US 5,764,235)

Regarding claims 29, 33: Kurahashi discloses an image communication system in which an image server (23, fig. 2) and a client computer (22, fig. 1) are communicating with each other. The client transmits image data (column 7 line 55-60) and information (editing data, column 7 line 67) relating to the image data to the server. The image server comprises: an image output device (the function part of control program of the image server that is sending image data to printer 134 of fig. 13, column 11 line 59, column 12 line 33-38, fig. 13) for outputting an image on the basis of the information relating to the image data transmitted from the client, (column 11 line 59, column 12 line 1-40, fig. 13) and an information transmission device (server processing unit, column 8 line 5-10) for transmitting, to the client computer, information (editing data, column 8 line 5-10) relating to the image data transmitted from the client computer. (Column 7 line 65-67, column 8 line 1-10). The client further includes a retrieval mean (see # 324 of fig. 3) to retrieval image data specified by the information relating to the image data transmitted from the image server, wherein the image output device and the image information transmission device in the image server, and the retrieval means in the client computer are each separate and distinct component within the image communication system, (See above discussion) wherein the

information relating to the image data corresponding to the resolution (column 8, line 2) in the client computer.

Kurahashi does not teach that the image data are film image data.

Cok, in the same area of scanning image data, teaches to create film image data to be stored in a server.

Therefore, it would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified Kurahashi's image processing method to include: film image data as image data.

It would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified Kurahashi's image processing method by the teaching of Cok because of the following reasons: (a) it would have allowed the image to be created in a manner that is very flexible and is usable over a wide distribution to diverse producers, as taught by Cok at column 2, lines 23-30; and (b) film image would have allowed users to create realistic images with low cost.

Kurahashi as modified by Cok still does not teach the information relating to the film image data corresponding to the type and resolution of a display in the client computer and the number of colors of the display device.

Hunt, in the same area of storing image data, teaches transmitting information relating to the film image data corresponding to the type (a first display with a certain resolution is a type of display and a display with a different resolution compare to the first display is another type of

display) and resolution (resolution, column 12, lines 55-60) of a display in the client computer and the number of colors of the display device. (RGB color, column 12, line 24)

Therefore, it would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified Kurahashi/Cok image processing method to include: transmitting information relating to the film image data corresponding to the type and resolution of a display in the client computer and the number of colors of the display device.

It would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified Kurahashi/Cok image processing method by the teaching of Hunt because of the following reasons: (a) it would avoid the transmission of excess data as taught by Hunt at column 2, lines 20-25; and (b) it would have allowed significantly better and more intelligent use of the bandwidth of the network system as taught by Hunt at column 2, lines 25-30

Claims 26, 30, 34-36, 38-43, 45-48, 50 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kurahashi et al. (U.S. Patent # 5,687,332) in view of Cok et al. (US 6,370,280)

Regarding claims 26, 30: Kurahashi teaches a client computer (22 of fig. 2) used in an image communication system in which an image server (23 of fig. 2) having a printer (134 of fig. 14) and the client computer are communicating with each other, comprising: a receiving device (311 of fig. 3) for receiving a part of a printing template image data (fig. 1) which is transmitted from the image server (column 8 line 1-8) and represents a part of a window synthesizing user

image (fig. 1), and which is used for printing processing in the printer (column 12 line 1-5); and a synthesis device (314 of fig. 3) for synthesizing the received part of the printing template image data and a part of user image data stored in the client computer. (See column 8, 9)

Kurahashi does not teach that the image data are film image data.

Cok, in the same area of scanning image data, teaches to create film image data to be stored in a server.

Therefore, it would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified Kurahashi's image processing method to include: film image data as image data.

It would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified Kurahashi's image processing method by the teaching of Cok because of the following reasons: (a) it would have allowed the image to be created in a manner that is very flexible and is usable over a wide distribution to diverse producers, as taught by Cok at column 2, line 23-30; and (b) film image would have allowed users to create realistic images with low cost.

Regarding claim 34: Kurahashi teaches to use processors to carry out the invention disclosed in claims 26, 30 (See 312, 314 of fig. 3) A processor is controlled by a program stored in a computer readable recording medium.

Regarding claims 35, 41: Kurahashi et al. teach an image editing system (see title, fig. 5) in which an image server (see # 52 of fig. 5) communicates with client computers (see # 53 and 55

of fig. 5) and the client computer edits images and sends the editing information (execution data indicating that an image is edited or reedited, if the information is that the image is to be edited by the server, the information is an indication that the image is to be edited in the server and not in the client) to the server, (Column 6 line 45-56), wherein execution data indicating that an image is edited for the first time (see leaf node of column 10 line 12-13) or reedited after the initial editing. (See column 10) The image server also sends editing image information to the client computer (see column 8 line 1-10), and the server further includes: a judging device (the judging program discussed at column 7 line 1-5) for judging whether the editing (both initial editing or re-editing) is allowed to be edited in the client computer or the server base on transmitted execution information and send editing information to the client computer that editing is allowed, an allowance data transmission device (the program of the server that controls the sending image data suitable for processing by client, column 7, lines 1-10) for transmitting, when the judgement device judges that the initial editing or re-editing after the initial editing of the image is allowed, allowance data to one or another client computer which as been allowed to edit or re-edit the image; and a receiving device (41 of fig. 4) for receiving editing information from the client computer. The client computer comprises a control device/ image editing device (see # 32 of fig. 2) for performing editing (reediting) in response to the receiving of allowance data.

Kurahashi does not teach that the image data are film image data.

Cok, in the same area of scanning image data, teaches to create film image data to be stored in a server.

Therefore, it would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified Kurahashi's image processing method to include: film image data as image data.

It would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified Kurahashi's image processing method by the teaching of Cok because of the following reasons: (a) it would have allowed the image to be created in a manner that is very flexible and is usable over a wide distribution to diverse producers, as taught by Cok at column 2, lines 23-30; and (b) film image would have allowed users to create realistic images with low cost.

Note: Kurahashi teaches to send editing information back and forth and to have the image to be edited in any one of the computers, and the computer can edit the image data more than one time. (See column 9 line 5-20) Therefore, the computer used in the client or the server to reedit the image data (edit more than one time) is a reediting device, and the transmission device used to transmit the reediting information is a reediting transmission device.

Regarding claim 36, 43: As discussed in the discussion of claim 35, Kurahashi teaches to send editing (reediting) information about the editing image. The editing information is directed to the portion that the image is to be edited because the portion that is not to be edited does not have editing information.

Regarding claim 42: This is a method claim claiming the methods that the apparatus performs in claim 41. Please see claim 41.

Regarding claim 38, 45: Kurahashi teaches that a plurality of computers can be form by a group of two computers (see fig. 5) and because the computers are on a network, the network would have other groups of computers such as the group of computers shown in fig. 13.

Regarding claim 39, 46: Kurahashi teaches that the client computer comprises a keyboard (see fig. 5) (comment entry device) for entering editing information which can include comments like enlarge. (See enlarge comment of fig. 1) Those comment would be included in the editing information and sent to other computer/server in case that the other computer/server is chosen to perform image editing.

Regarding claim 40, 47: Kurahashi teaches that the edited image (6 of fig. 1) is constituted by a plurality of object images. (See fig. 1) The editing functions include deletion, (see column 10 line 55), addition, (see composite of fig. 1) and alteration. (See enlarge of fig. 1)

Regarding claim 48: Kurahashi teaches to use a computer (see client computer and server of fig. 5) which has a program to control the editing system in claim 35. Please see claim 35.

Regarding claim 50: Kurahashi teaches that the image server includes an editing information transmission device (41 of fig.4) for transmitting editing information relating to the edited image which has been transmitted from one client computer. (See discussion on claim 35) The client includes an image reediting device for reediting the edited image, (see fig.1 and fig. 7) and a reediting information transmission device for transmitting reediting information relating to the reedited image to the server. (See column 9 line 25-50)

Claims 5-7, 13-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hunt (US 5,764,235) in view of Cok et al. (US 6,370,280) and Maniwa. (US 5,933,584)

Regarding claim 5: Hunt discloses an image communication system (see fig. 1A) in which an image server and a client computer having a display (see #330 of fig. 3) communicating with each other, wherein the image server stores image data. (See column 4 line 66) The server comprises: a receiving device (106 of fig. 1) receiving a command from a first transmission device (the function part of the control program that is sending a request, column 3 line 2) in the client computer to transmit image data (see column 3 line 2, 106 of fig. 1) stored in the image server, and to display, (330 fig. 3) in the client, information relating the display (thumbnail or low quality) that is transmitted from a second transmission device (the function part of the control program that is sending the image control information, column 3 line 3) of the client (see column 9 line 1-5, column 3 line 1-10), the first and second transmission devices transmitting the respective command and display information to reduce the amount of image data that the image server is required to process; (column 6 line 15-30) a quantity reduction device (see column 2 line 64-65, #114 of fig. 1B) to reduce image data to be transmitted according to the display information received from the client; and an image data transmission device (the function part of the program that is controlling the server to transmit image, column 2 line 30-55) transmitting, to the client computer, the reduced image data.

Hunt does not teach that the image data are film image data.

Cok, in the same area of scanning image data, teaches to create film image data to be stored in a server.

Therefore, it would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified Hunt's image processing method to include: using film image data as image data.

It would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified Hunt's image processing method by the teaching of Cok because of the following reasons: (a) it would have allowed the image to be created in a manner that is very flexible and is usable over a wide distribution to diverse producers, as taught by Cok at column 2, line 23-30; and (b) film image would have allowed users to create realistic images with low cost.

Hunt as modified by Cok still do not teach the image output device store the film image after subjecting the film image to display direction conversion such that the film image data is displayed in correct direction on the display device.

Maniwa, in the same area of storing image data, teaches storing the image after subjecting the image to display direction conversion such that the film image data is displayed in correct direction on the display device. (Column 29, lines 50-60)

Therefore, it would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified Hunt/Cok image processing method to include: store the

film image after subjecting the film image to display direction conversion such that the film image data is displayed in correct direction on the display device.

It would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified Hunt/Cok image processing method by the teaching of Maniwa because of the following reasons: (a) it would have allowed the image to be displayed in a correct direction as taught by Maniwa at column 29, lines 55-61.

Regarding claim 6: Hunt teaches the display information is information relating to the maximum number of color (amount of RGB data, column 12, line 23, that is suitable for display) which can be displayed on the display device, and wherein the data quantity reduction device includes color reduction device (the program of the processing 1100, column 12, lines 15-17, that determines the adjusted amount of data to be transmitted) for reducing a number of colors of an image (RGB that is not transmitted, e.g., column 12, lines 23-25, and column 12, lines 35-45) represented by the image data to be transmitted on the basis of the information relating to the maximum number of colors. (amount of RGB data, column 12, line 23, that is suitable for display)

Regarding claim 7: Hunt teaches the display information is information relating to the resolution of the display device (column 12, line 52) and wherein the data quantity reduction device includes thinning means (1110, column 12, lines 14-20) for thinning out the image data (thinning out the additional data, column 12, lines 35-43, i.e., the additional data that is not originally transmitted) on the basis of the information relating to the resolution, to be transmitted

in response to the image transmission command, so as to reduce the data quantity of the image data. (Column 12, lines 15-17, column 12, lines 35-40).

Regarding claims 13, 17, 18: Hunt discloses an image communication system (see fig. 1A) in which an image server and a client computer (image data receiver) having a display (see #330 of fig. 3) are communicating with each other. The image server stores image data. (See column 4 line 66) The image server also comprises: an image data display transmission device (see the transmission medium between # 106 and # 304 of fig. 3) for transmitting image display data for displaying a plurality of sample images (various images, column 13, lines 20-25) in side by side fashion (all images on a display are located in a side by side (right, up, top, bottom) fashion when the various images are displayed on a display device) for comparing and selection by a user, (see column 13 line 20-30) each of the sample images having different data size/characteristic (see column 8 line 46-68, column 9 line 1-5) and being transmitted to the client computer. The client computer comprises an image characteristics setting device (display, # 330 of fig. 3) for receiving the transmitted image display data, for displaying the plurality of sample images on the display device on the basis of the received image data, and for determining characteristics relating to the image selected from the display sample images; (column 13, lines 20-25) and a transmission device (see # 324 of fig. 3) for transmitting image characteristics to the server. (See supplied information and amount of data (data size) of abstract).

Hunt does not teach that the image data are film image data.

Cok, in the same area of scanning image data, teaches to create film image data to be stored in a server.

Therefore, it would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified Hunt's image processing method to include: using film image data as image data.

It would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified Hunt's image processing method by the teaching of Cok because of the following reasons: (a) it would have allowed the image to be created in a manner that is very flexible and is usable over a wide distribution to diverse producers, as taught by Cok at column 2, line 23-30; and (b) film image would have allowed users to create realistic images with low cost.

Hunt as modified by Cok still do not teach subjecting the sample film image to display direction conversion such that the film image data is displayed in correct direction on the display device.

Maniwa, in the same area of storing image data, teaches storing the image after subjecting the image to display direction conversion such that the film image data is displayed in correct direction on the display device. (Column 29, lines 50-60)

Therefore, it would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified Hunt/Cok image processing method to include:

subjecting the sample film image to display direction conversion such that the film image data is displayed in correct direction on the display device.

It would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified Hunt/Cok image processing method by the teaching of Maniwa because of the following reasons: (a) it would have allowed the image to be displayed in a correct direction as taught by Maniwa at column 29, lines 55-61.

Regarding claim 14: Hunt teaches wherein the image display data transmission device transmits the image display data (image control data, column 11, lines 30-35) representing the plurality of images having different tonalities (different quality of images, column 12, lines 35-40) to the image receiver.

Regarding claim 15: Hunt teaches wherein the image server further includes an image data transmission device for transmitting, if the image data receiver can change the characteristic of the image displayed (see display can change to a better quality, column 12, lines 35-45) on the display device, image data whose characteristics have not been adjusted, (the data sent by the server that is before the additional data is being sent, column 12, lines 35-45), while transmitting, if the image data receiver cannot change (the quality that limited by the author, column 12, lines 60-65) the characteristics of the displayed on the display device, image data whose characteristics has been adjusted (appropriate amounts of image data, column 13, line 46) in accordance with the image data characteristics data (request for image, column 13, line 43) transmitted from the image characteristics data transmission device to the image data receiver.

Regarding claim 16: Hunt teaches that the image data size can be stored in the server. (See fig. 6A) (at least one)

Claims 19, 20, 22-24, 27, 28, 31, 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hunt (US 5,764,235) in view of Cok et al. (US 6,370,280)

Regarding claims 19, 27, 31: Hunt discloses an image communication system (see fig. 1A) in which a client computer (102, fig. 1, 102 is a client because it would request, from another computer, information that is needed by the server to send the appropriate amount of data, column 13, lines 35-40) is communicating with a server (104, fig. 1A. 104 is a server because it would serve the data that 102 is request, column 13, lines 35-40) having a display (see #330 of fig. 3) the client computer comprising: a quantity reduction device (see column 2 line 64-65) for reducing the data quantity of image data to be transmitted to the server so that the data quantity of the image data to be transmitted is equal to or less than the data quantity of the image data representing the image to be outputted from the output device/display; and an image transmission device (the program of the client that is controlling the transmitting of image data, column 12, lines 35-45) to transmit the reduced image data (See column 2 line 30-32) to the server, wherein the image data quantity reduction device further includes: print image area designation means (the control of the client that is controlling the print format such that the image is printed on an area of recording medium, column 12, lines 44-60) for designating an image area to be printed of an image represented by image data of one frame (one print); and partial image data extraction

means (that program of the client that is controlling the amount of data to be sent, column 12, lines 35-45) for extracting partial image area data (the addition data that is not sent before, column 12, lines 35-45) representing the designated image area from the image data of one frame.

Hunt does not teach that the image data are film image data.

Cok, in the same area of scanning image data, teaches to create film image data to be stored in a server.

Therefore, it would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified Hunt's image processing method to include: film image data as image data.

It would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified Hunt's image processing method by the teaching of Cok because of the following reasons: (a) it would have allowed the image to be created in a manner that is very flexible and is usable over a wide distribution to diverse producers, as taught by Cok at column 2, line 23-30; and (b) film image would have allowed users to create realistic images with low cost.

Regarding claim 20: Hunt teaches wherein the image quantity reduction device includes at least one of resolution conversion means (processing 1100, that converts image format with the correct resolution, column 12, lines 14-25, column 12, line 55-60) for converting the image data to be transmitted into image data having a resolution which is less than or equal to the resolution of the image output from the output device (display resolution, column 12, lines 55-60), so as to

reduce the quantity of the image data, and thinning means (the program of the client that is controlling the image size to be display, column 9, lines 1-5) for thinning the image data such that the size is equal to the size of the output image.

Regarding claim 22: Hunt teaches wherein the image data quantity reduction device includes a compression rate determine means (114 of 1B) for determining the compression rate (the same image is being compressed into different image data size, column 8, lines 45-67) of the image data to be transmitted to the image server on the basis of the speed of transmission of the image data between the image server and the client, (different data sizes, column 8, lines 45-67, used for reducing transmission time, abstract), image data compression means (the program of the client that is performing the data compression, column 12, lines 15-20) for compressing the image data at the predetermined compression rate.

Regarding 23, 28, 32: Hunt teaches a client computer (104 fig. 1) used in an image communication system (fig. 1) in which an image server and the client computer communicate with each other, comprising: a compression rate setting device (310 of fig. 3) for setting the compression rate of image data; (the same image is being compressed into different image data size, column 8, lines 45-67) a calculation device (310 of fig. 3) for calculating information (different data sizes, column 8, lines 45-67, used for reducing transmission time, abstract) relating to the time required for transmission in a case where the image data compressed at the set compression rate; (the same image is being compressed into different image data size, column 8, lines 45-67) and a display for displaying (# 330 of fig. 3) information (different data size, column

8, lines 45-67, column 9, lines 1-5) related to the calculated time for transmission. (See column 9 line 15-25, fig.6)

Hunt does not teach that the image data are film image data.

Cok, in the same area of scanning image data, teaches to create film image data to be stored in a server.

Therefore, it would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified Hunt's image processing method to include: film image data as image data.

It would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified Hunt's image processing method by the teaching of Cok because of the following reasons: (a) it would have allowed the image to be created in a manner that is very flexible and is usable over a wide distribution to diverse producers, as taught by Cok at column 2, line 23-30; and (b) film image would have allowed users to create realistic images with low cost.

Regarding claim 24: Hunt teaches that the client computer has a display control device (310 of fig. 3) for controlling the display to display an image represented by the image data compressed at the set compression rate. (See column 9 line 1-5)

Claims 10, 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Uda et al. (US 5,720,013) in view of Maniwa (US 5,933,584) and Cok et al. (US 6,370,280)

Regarding claims 10, 12: Uda discloses an image server (see # 107 of fig.1), used in an image communication system in which the server having a printer (104s of fig. 1) and the client computer having a display, (see # 106 of fig. 1) are communicating with each other, comprising: an image reading device, (see # 103a of fig. 1) a first color conversion device (see 601 of fig. 6) for performing first color conversion processing on the read image in accordance with a characteristic of the printer, a print controller (402 of fig. 4) for controlling the printer so as to print an image from the first color converted image data, a second color conversion device (503, column 6, lines 55-60) for performing second color conversion processing on the read image data in accordance with a characteristic of the display device (RGB, column 6, line 60); and an image transmission device (202, fig. 2) for transmitting the second color converted image data to the client computer. (Column 11, lines 45-50)

Uda does not teach that the image data are film image data.

Cok, in the same area of scanning image data, teaches to create film image data to be stored in a server.

Therefore, it would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified Uda's image processing method to include: using film image data as image data.

It would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified Uda's image processing method by the teaching of Cok because of the following reasons: (a) it would have allowed the image to be created in a manner

that is very flexible and is usable over a wide distribution to diverse producers, as taught by Cok at column 2, line 23-30; and (b) film image would have allowed users to create realistic images with low cost.

Uda as modified by Cok still does not teach the image output device outputting the film image after subjecting the film image to display direction conversion so that the film image is displayed on the display in a correct direction.

Maniwa, in the same area of storing image data teaches outputting image after subjecting the image to display direction conversion so that the film image is displayed on the display in a correct direction. (Column 29, lines 50-60)

Therefore, it would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified Uda/Cok image processing method to include: the image output device outputting the film image after subjecting the film image to display direction conversion so that the film image is displayed on the display in a correct direction.

It would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified Uda/Cok image processing method by the teaching of Maniwa because of the following reasons: (a) it would have allowed the image to be displayed in a correct direction as taught by Maniwa at column 29, lines 55-61.

Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hunt et al in view of Maniwa and Cok As applied to claim 5 above and further in view of Uda et al. (US 5,720,013)

Regarding claim 8: Hunt teaches a color conversion processing means (the program of the processing 1100 that selects the format for display, column 12, lines 14-30) of the reduced image data on the basis of data representing characteristics of the display.

Hunt/Cok/Maniwa does not teach a printer for the server to print.

Uda teaches to provide a printer for a server to print image data for a host. (See fig. 1) Hunt and Uda are combinable because they are from the same area of using a server to store image data.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Hunt/Cok/Maniwa image server to include: a printer for the server for printing images.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Hunt/Cok/Maniwa image server by the teaching of Uda because of the following reasons: (a) it would have allowed remote users to utilize a distant printer which is effective as discussed in column 1 line 58-60 of Uda.

Claim 49 are rejected under 35 U.S.C. 103(a) as being unpatentable over Uda et al. (US 5,720,013) in view of Maniwa (US 5,933,584) and Cok et al. (US 6,370,280) as applied to claim 10, and further in view of Hirono et al. (US 5,926,154)

Regarding claim 49: Uda discloses all of the claim limitations except a display direction conversion processing device for displaying the image data in normal position.

Hirono teaches that inputting an image position into an image memory and to display the image in normal position. (See column 7 line 54-67 and column 8 line 1-7) Uda, and Hirono are combinable because they are from the same area of displaying an image.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the image server of Uda/Maniwa/Cok to include: a display direction conversion processing device to display the image in normal position.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the image server of Uda/Maniwa/Cok by the teaching of Hirono because of the following reasons: (a) it would have allowed a user to scan in an image at any position and read out the image at a normal position as discussed in column 8 line 6-7 of Hirono which is desirable.

Note: the display direction converted data in the server is image data.

(11) Response to Argument

Appellant, on page 11-16, brief, argues that there are no motivation and suggestion to combine Cok's film image, Maniwa's display direction conversion, with Kurahashi.

In response: Kurahashi discloses an image communication system in which an image server (23, fig. 2) and a client computer (22, fig. 1) are communicating with each other. The client transmits image data (column 7 line 55-60) and information (editing data, column 7 line 67) relating to the image data to the server. The image server comprises: an image output device

(the function part of control program of the image server that is sending image data to printer 134 of fig. 13, column 11 line 59, column 12 line 33-38, fig. 13) for outputting an image on the basis of the information relating to the image data transmitted from the client, (column 11 line 59, column 12 line 1-40, fig. 13) to a printer. A printer is a device that prints an image onto a recording medium for displaying the image to a user.

The image data that is being transmitted to the server is generated by using an image scanner, column 7, lines 50-56, Kurahashi et al. To the computer/server, it does not matter whether the image data is originated from a painted art, or a filmed image, the computer would be used to process those images, as long as those images have been digitized by using, for example, an image scanner. Over a century, people in all ages, have been learned to use films for recording images. The film is then scanned by a scanner for providing image data to a printer for generating photographs. Therefore, it would have been obvious to a person with ordinary skill in the art would have thought about the scanned images, that is being processed by the server of Kurahashi, include film images-even though Kurahashi does not specifically mentioning film images.

Cok's reference is being used is to prove that it is well known in the art that images are being recorded onto a photographic film. Image scanner, is being used in image processing, such as a film scanner is used to digitize film images to be supplied to a server computer for processing (Column 5, lines 50-65, Cok). Since film images have been used by human for over a century to produce printed products, knowledge and the technology improvement over a

century have allowed film images to be created in a manner that is very flexible and are usable over a wide distribution to diverse producer for producing different print products, such as creating printed images onto papers, T-shirts, coffee mug, (see column 1, lines 15-20, column 2, lines 24-27). Technology improvement over a century also allows users to create realistic image with low cost by recording images onto films.

Therefore, it is also beneficiary for Kurahashi to record images onto films and to use the image scanner to digitize the film images to be supplied to the server computer.

Kurahashi also does not specifically states that the image output device outputting film image after subjecting the film image to display direction conversion.

However, Kurahashi teaches the image output device (the function part of control program of the image server that is sending image data to printer 134 of fig. 13, column 11 line 59, column 12 line 33-38, fig. 13) outputs the image (film image, see previous discussion) to a printer for printing the outputted image onto a recording medium for displaying the image to users. Inherently, a printer prints outputted images (from the server) in one direction only. For example, a printer prints 8x11 image size is being used to print 100 copies of image 6 of fig. 1, Kurahashi. If "Wow!" is being printed on the left hand top corner of the 8x11 paper, all of the images being printed would be in the same orientation. Therefore, the scanned image must be subjected to display direction conversion such that "Wow!" is being printed on the left-hand top corner of the 8x11 paper every time. Without the display direction conversion, statistic

tells us that the "Wow!" will be printed on the left-hand top corner of the 8x11 paper 1/4 of the time.

Maniwa shows that it is well-known in the art that a scanned image must go through a display direction conversion (rotate an image) if the paper feed direction in the printer is different from that of the reading of the scanner. (Column 29, lines 50-61)

Appellant, on top of page 14, argues that Maniwa does not teach display direction conversion.

In response: Column 29, lines 50-60, Maniwa clearly teaches to rotate a scanned image (display direction conversion) when the paper feed direction in the printer is different from that of reading by the scanner. Since claim 25 does not specifically claim a TV monitor type of display; the display of claim 25 is being interpreted broadly as displaying a printed image to a human observer.

Appellant, on page 17, brief, argues that Hunt does not teach transmitting image (film) data corresponding to the number of colors of the display device.

In response: Hunt, column 11, lines 30-35, column 5, lines 20-33, column 12, lines 44-67, teaches client control data is being obtained by a server from the client such that, from the control data, image file of a certain size is being sent from the server to the client. Hunt, column 12, line 20-25, 55-60, further teaches the control data includes display format such as RGB. The examiner interprets RGB as color of display. Showing RGB, inherently also shows the number of the colors. RGB, in this example, are three different colors.

Appellant, on page 20, brief, argues that Cok does not teach printing template film image data is transmitted from server 56 to the client computer.

In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.,* 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

Main reference (Kurahashi) clearly teaches: a receiving device (311 of fig. 3), in a client, for receiving a part of a printing template image data (fig. 1) which is transmitted from the image server (column 8 line 1-8) and represents a part of a window synthesizing user image (fig. 1), and which is used for printing processing in the printer (column 12 line 1-5); and a synthesis device (314 of fig. 3) for synthesizing the received part of the printing template image data and a part of user image data stored in the client computer. (See column 8, 9)

Appellant, on page 20, brief, argues that Kurahashi does not teach a subsequent re-editing based on a transmitted execution command.

In response: The limitations of "a subsequent re-editing based on a transmitted execution command" is not part of the limitation of claims 26, and 30.

Kurahashi teaches a judging device (the judging program discussed at column 7 line 1-5) for judging whether the editing (both initial editing or re-editing, note) is allowed to be edited in the client computer or the server base on transmitted execution information. (Editing data, column 8, lines 40-45)

Note: Kurahashi teaches to send editing information back and forth and to have the image to be edited in any one of the computers, and the computer can edit the image data more than one time. (See column 9 line 5-20) Editing is the first time and reediting is editing the edited image.

Appellant, on top of page 21, brief, argues that Maniwa does not teach display direction conversion.

In response: Column 29, lines 50-60, teaches to rotate a scanned image (display direction conversion) when the paper feed direction in the printer is different from that of reading by the scanner. Although the display of Maniwa is a printer device, the concept is the same. Information of how the image is to be displayed with respect to the display medium is being added to the transmitted display image (display direction conversion) from the server to a display in order to avoid image display direction/orientation being displayed randomly.

Appellant, on page 21, brief, argues that Hunt does not teach display information relating to maximum number of colors of the display device.

In response: Hunt, column 11, lines 30-35, column 5, lines 20-33, column 12, lines 44-67, teaches client control data is being obtained by a server from the client such that, from the control data, image file of a certain size is being sent from the server to the client. Hunt, column 12, line 20-25, 55-60, further teaches the control data includes display format such as RGB. The examiner interprets RGB as color of display. Showing RGB, inherently also shows the number of the colors. RGB, in this example, are three (maximum number of light beams being used is three in Hunt) light beam colors in Hunt's display.

Appellant, on page 22, brief, argues that Hunt does not teach client reducing film image data and transmitting the reduced data to the server, and there is no motivation to combine Hunt and Cok.

In response: Hunt discloses an image communication system (see fig. 1A) in which a client computer (102, fig. 1, 102 is a client because it would request, from another computer, information that is needed by the server to send the appropriate amount of data, column 13, lines 35-40) is communicating with a server (104, fig. 1A. 104 is a server because it would serve the data that 102 is request, column 13, lines 35-40) having a display (see #330 of fig. 3) the client computer comprising: a quantity reduction device (see column 2 line 64-65) for reducing the data quantity of image data to be transmitted to the server so that the data quantity of the image data to be transmitted is equal to or less than the data quantity of the image data representing the image to be outputted from the output device/display; and an image transmission device (the program of the client that is controlling the transmitting of image data, column 12, lines 35-45) to transmit the reduced image data (See column 2 line 30-32) to the server.

Hunt does not teach that the image data are film image data.

Cok's reference is being used is to prove that it is well known in the art that images are being recorded onto a photographic film. (Column 5, lines 50-65, Cok) Since film images has been used by human for over a century to produce printed products, knowledge and the technology improvement over a century have allowed film images to be created in a manner that is very flexible and are usable over a wide distribution to diverse producers for producing

different print products, such as creating printed images onto papers, T-shirts, coffee mug, (see column 1, lines 15-20, column 2, lines 24-27). Technology improvement over a century also allows users to create realistic image with low cost by recording images onto films.

Therefore, it is also beneficiary for Hunt to use film images as the image data.

Appellent, on page 25, brief, argues that Hirono does not teach server transmitting the display direction converted image data to the client computer.

In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.,* 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

Uda discloses an image server (see # 107 of fig.1), used in an image communication system in which the server having a printer (104s of fig. 1) comprising: an image reading device, (see # 103a of fig. 1) and an image transmission device (202, fig. 2) for transmitting image data to the client computer. (Column 11, lines 45-50)

Uda does not teach the image output device outputting the film image after subjecting the film image to display direction conversion so that the film image is displayed on the display in a correct direction.

Maniwa, in the same area of storing image data teaches outputting image to a display device from a server after subjecting the image to display direction conversion in the server so that the image is displayed on the display in a correct direction. (Column 29, lines 50-60)

Therefore, it would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified Uda's image processing method to include: the image output device, in the server, outputting the image after subjecting the image to display direction conversion so that the image is displayed on the display in a correct direction.

It would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified Uda's image processing method by the teaching of Maniwa because of the following reasons: (a) it would have allowed the image to be displayed in a correct direction as taught by Maniwa at column 29, lines 55-61.

Appellent, on page 25, and 26, brief, argues that pages 37, 38, 43-47, 50-51, 71-73, 80-83, 85-86, 95-96, 104-107, 112-115, fig. 1, 24, and 31 teach the subject matter rejected under 112, first paragraphs.

In response: The applicant has not specified how the first paragraph of 35 U.S.C. is complied with, including, how the specification and drawings describe the subject matter defined by each of the rejected claims.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

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